U.S. Patent Application Serial No. 10/083,508 Response to Office Action dated August 25, 2004

## **AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **LISTING OF CLAIMS:**

Claims 1-2 (canceled).

Claim 3 (currently amended): A process Process for determining an angle of polarization plane from a vertical plane or a horizontal plane in a radio LAN master station according to claim † including a transceiver, a plurality of directional antennas directed to each of specific directions, and a power distributor coupling said antennas with said transceiver, the process comprising the steps of [[;]]:

selecting one of the antennas having the largest interference[[,]];

rotating <u>an</u> angle of polarization plane of the selected antenna to determine <u>an</u> angle of polarization plane called a reference angle so that interference becomes [[the]] <u>a</u> minimum[[,]]; and

determining <u>an</u> angle of polarization plane of <u>each of the</u> other antennas based upon said reference angle so that <u>an</u> angle of polarization plane of any <u>said</u> antenna is orthogonal to <u>an</u> angle of polarization plane of an adjacent antenna.

Claim 4 (currently amended): A process Process for determining an angle of polarization plane from a vertical plane or a horizontal plane in a radio LAN master station system according to claim 1 including a transceiver, a plurality of directional antennas directed to each of specific directions, and a power distributor coupling said antennas with said transceiver, the process comprising the steps of[[;]]:

selecting one of the antennas having the largest interference[[,]];

selecting one of <u>a</u> vertical polarization plane and <u>a</u> horizontal polarization plane of said selected antenna, as a reference polarization plane[[,]]; and

determining <u>an</u> angle of polarization plane of other antennas based upon said reference polarization plane so that <u>a</u> polarization plane of any antenna is orthogonal to an adjacent antenna.

Claim 5 (currently amended): A process Process for determining an angle of polarization plane from a vertical plane or a horizontal plane in a radio LAN master station system according to claim 1 including a transceiver, a plurality of directional antennas directed to each of specific directions, and a power distributor coupling said antennas with said transceiver, the process comprising the steps of [[;]]:

first steps comprising the steps of;

selecting one of the antennas having the largest interference[[,]];

selecting one of  $\underline{a}$  vertical polarization plane and  $\underline{a}$  horizontal polarization plane of said selected antenna, as a reference polarization plane [[,]];

determining the angle of polarization plane of other antennas based upon said reference polarization plane so that a polarization plane of any antenna is orthogonal to an adjacent antenna[[,]];

second steps comprising the steps of[[;]]:

selecting one of the antennas having the largest interference larger greater than a predetermined threshold[[,]]; and

reversing the polarization plane of said selected antenna from vertical polarization to horizontal polarization, or from horizontal polarization to vertical polarization[[,]]; and third steps repeating each of the steps of said second steps until interference of all the antennas becomes smaller less than said predetermined threshold.

Claim 6 (currently amended): A process Process for determining an angle of polarization plane from a vertical plane or a horizontal plane in a radio LAN master station system according to claim 1 including a transceiver, a plurality of directional antennas directed to each of specific directions, and a power distributor coupling said antennas with said transceiver, the process comprising the [[steps]] step of[[;]]:

selecting one of  $\underline{a}$  horizontal polarization and  $\underline{a}$  vertical polarization of each antenna, so that interference of said antenna is the smaller.

Claim 7 (currently amended): A process Process for determining an angle of polarization plane from a vertical plane or a horizontal plane in a radio LAN master station system according to claim 1 including a transceiver, a plurality of directional antennas directed to each specific directions, and a power distributor coupling said antennas with said transceiver, the process comprising the steps of [[;]]:

rotating <u>a</u> polarization plane of each antenna so that interference in said antenna is [[the]] <u>a</u> minimum[[.]]; <u>and</u>

determining an angle of polarization plane which provides said minimum interference.

Claim 8 (currently amended): A process Process for determining an angle of polarization plane from a vertical plane or a horizontal plane in a radio LAN master station system according to claim 1 including a transceiver, a plurality of directional antennas directed to each of specific directions, and a power distributor coupling said antennas with said transceiver, the process comprising the steps of [[;]]:

- (a) the antennas being classified into groups each having a plurality of antennas, so that interference between adjacent groups is small[[,]]:
  - (b) determining a polarization plane of a first antenna in a first group[[,]];
- (c) determining <u>a</u> polarization plane of a second antenna in a first group, said second antenna locating adjacent to said first antenna, so that <u>a</u> polarization plane of said second antenna is orthogonal to <u>a</u> polarization plane of said first antenna[[.]];

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- (d) repeating said step (c) for other antennas[[,]]; and
- (e) repeating said steps (b) and (c) for the antennas in other groups.